

***NATIONAL WEATHER SERVICE ALASKA REGION SUPPLEMENT 06-2002
APPLICABLE TO NWSI 10-513
JANUARY 7, 2003***

***Operations and Services
Public Weather Services, NWSPD 10-5
WFO Winter Weather Products Specification, NWSI 10-513
ALASKA WFO WINTER WEATHER PRODUCTS SPECIFICATION***

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The section numbers in this supplement refer to the section numbers in Instruction 10-513.

Signed by Laura K. Furgione for	12/24/02
Richard C. Przywarty	Date
Regional Director	

WFO Winter Weather Products Specification

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3. Winter Storm Outlook (product category SPS).

3.2 Issuance Guidelines.

3.2.2 Issuance Criteria. WFOs should issue Winter Storm Outlooks when conditions are favorable for a major winter storm to develop over part or all of the forecast area in the three to five day forecast period, or beyond the point normally covered by a watch. Winter Storm Outlooks are issued when there is a **60 percent or greater** chance of a hazardous winter weather event exceeding the local criteria.

4. Winter Storm Watches (product category WSW).

4.2 Issuance Guidelines.

4.2.2 Issuance Criteria. WFOs will issue a Winter Storm Watch when conditions are favorable for a hazardous winter weather event to develop over part or all of the forecast area, but the occurrence is uncertain. WFOs should issue Winter Storm Watches for the second, third, or occasionally fourth forecast periods, when there is a **60 percent or greater** chance of a hazardous winter weather event meeting or exceeding local warning criteria.

4.3 Technical Description.

4.3.4.2 Segmented Forecast Information. Each segment of the winter storm watch will include a watch headline followed by descriptive text providing the reason the watch was issued. The information provided in each segment should be concise and specific.

- a. Watch Headline. The watch headline will use the phrase “WINTER STORM WATCH IN EFFECT” or “BLIZZARD WATCH IN EFFECT” followed by a general time phrase to describe the time period for which the watch is effective. If the watch area represents only a portion of a zone instead of the entire zone, the headline will also include a brief geographical description of the watch area. The watch headline will begin and end with an ellipsis (...).

Examples:

...WINTER STORM WATCH IN EFFECT SUNDAY AND SUNDAY NIGHT...

...BLIZZARD WATCH IN EFFECT FROM WAINWRIGHT WESTWARD FOR MONDAY THROUGH TUESDAY...

5. Winter Weather Warnings (product category WSW).

5.2 Issuance Guidelines.

5.2.2 Issuance Criteria.

5.2.2.1 Winter Weather Warning Products. WFOs will issue the following winter weather products:

Warning Product Name	Issuance Criteria
Blizzard Warning	Sustained wind or frequent gusts greater than or equal to 35 mph accompanied by falling and/or blowing snow, frequently reducing visibility to less than 1/4 mile for three hours or more.
Heavy Snow Warning	Snow accumulation meeting or exceeding locally defined 12 and/or 24 hour warning criteria.
Ice Storm Warning	Ice accumulation meeting or exceeding locally defined warning criteria.
Heavy Sleet Warning	Sleet accumulation meeting or exceeding locally defined warning criteria.
Winter Storm Warning	Winter weather event having more than one predominant hazard (see NWSI 10-513 Section 5.2.2.4 for more detail) meeting or exceeding locally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements.

Table 1 – WFO Warning Products

Warning and advisory thresholds for winter weather hazards for all Alaska zones are given in Appendix A.

The WFO Shift Supervisor may authorize a WSO in the WFO's service area to issue warning and advisory products for selected zones. All warning and advisory statements prepared by the WSO must be coordinated with and agreed to by the Shift Supervisor before they are disseminated. The coordination and concurrence should be documented in the duty logs and/or warning checklists at the WFO and WSO.

The WSO staff should contact the area WFO Shift Supervisor when, in the opinion of the WSO staff, warning or advisory conditions are likely and there is no warning or advisory in effect or being coordinated by the area WFO. Reports of event approaching or achieving warning or advisory thresholds in or near the WSO service area are useful as evidence. The WFO should coordinate with the WSO and resolve any proposed WSO actions within 15 minutes of the initiated contact.

There may be occasions at a WSO when the coordination and concurrence cannot be accomplished in a timely enough manner to support the protection of life and property. In this case, the WSO should issue the warning product and accomplish the coordination and concurrence as soon as contact can be made with the WFO Shift Supervisor.

5.3 Technical Description.

5.3.4.2 Segmented Forecast Information. Each segment of the winter storm warning will include a warning headline followed by descriptive text providing the reason the warning was issued. The information provided in each segment should be concise and specific.

- a. Warning Headline. The warning headline will include the winter storm warning type followed by a general time phrase to describe the time period for which the warning is effective. If the warning area represents only a portion of a zone instead of the entire zone, the headline will also include a brief geographical description of the warning area. The warning headline will begin and end with an ellipsis (...).

Examples:

...WINTER STORM WARNING IN EFFECT THIS AFTERNOON THROUGH THIS EVENING...

...HEAVY SNOW WARNING REMAINS IN EFFECT FOR THE UPPER HILLSIDE THROUGH TONIGHT...

6. Winter Weather Advisories (product category WSW).

6.2 Issuance Guidelines.

6.2.2 Issuance Criteria.

6.2.2.1 Winter Weather Advisory Products. WFOs will issue advisories based upon regionally and locally defined criteria by headlining the Zone Forecast Product (ZFP). (For headline details, refer to NWSI 10-513 Section 6.3.4.2a.)

To supplement the information provided in the ZFP headline, WFOs may issue winter weather advisory products. These products are used to elaborate on the timing and intensity of hazardous weather events, and they should be issued for events that are expected to affect transportation and commerce or will otherwise impact the public in such a way that additional forecast or call-to-action information is needed to support public safety. Advisory products are particularly useful for early or late season events and for events that are climatologically unusual or infrequent. WFO Management should determine which, if any, criteria (e.g., freezing rain with an ice accumulation of .10 inch or greater) should require the issuance of an advisory product in their area of responsibility, and this information should be documented in the Station Duty Manual.

WFOs may issue the following winter weather advisory products:

Advisory Product Name	Issuance Criteria
Snow Advisory	Snowfall accumulation meeting or exceeding locally defined advisory criteria, but remaining below warning criteria.
(Snow and*) Blowing Snow Advisory	Sustained wind or frequent gusts of 25 to 34 mph accompanied by blowing snow (with or without falling snow*), occasionally reducing visibility to 1/4 mile or less for three hours or more.
Freezing Rain Advisory	Light ice accumulation (freezing rain and/or freezing drizzle) meeting or exceeding locally defined advisory criteria, but remaining below warning criteria.
Sleet Advisory	Sleet accumulation reaching or exceeding locally defined advisory criteria, but remaining below warning criteria.
Winter Weather Advisory	Winter weather event having more than one predominant hazard meeting or exceeding locally defined 12 and/or 24 hour advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.

Table 2 – WFO Advisory Products

Warning and advisory thresholds for winter weather hazards for all Alaska zones are given in Appendix A.

The WFO Shift Supervisor may authorize a WSO in the WFO's service area to issue advisory products for selected zones. For more information, see Section 5.2.2.1 above.

6.3 Technical Description.

6.3.4.2 Segmented Forecast Information. Each segment of the winter weather advisory will include an advisory headline followed by descriptive text providing the reason the advisory was issued. The information provided in each segment should be concise and specific.

- a. Advisory Headline. The advisory headline will include the winter weather advisory type followed by a general time phrase to describe the time period for which the advisory is effective. If the advisory area represents only a portion of a zone instead of the entire zone, the headline will also include a brief geographical description of the advisory area. The advisory headline will begin and end with an ellipsis (...).

Examples:

...FREEZING RAIN ADVISORY IN EFFECT THROUGH LATE MORNING...

...SNOW AND BLOWING SNOW ADVISORY REMAINS IN EFFECT

NWS ARS 06-2002 JANUARY 7, 2003

FOR THE SKAGWAY AREA THROUGH TONIGHT...

APPENDIX A - Zone Specific Winter Weather Advisory and Warning Criteria

Zones (WFO)	Advisory Threshold	Warning Threshold
Blowing Snow and Blizzard		
All Zones	Sustained wind or frequent gusts greater than or equal to 25 mph accompanied blowing snow (with or without falling snow), occasionally reducing visibility to 1/4 mile or less for 3 hours or more.	Sustained wind or frequent gusts greater than or equal to 35 mph accompanied by falling and/or blowing snow, frequently reducing visibility to less than 1/4 mile for 3 hours or more.
Freezing Rain and Ice Storm		
021-029 (Juneau) 101-195 (Anchorage)	Light ice accumulation (freezing rain and/or freezing drizzle) less than 1/4 inch.	Ice accumulation of 1/4 inch or greater.
201-226 (Fairbanks)	Light ice accumulation (freezing rain and/or freezing drizzle) less than 0.10 inch.	Ice accumulation of 0.10 inch or greater.
Sleet and Heavy Sleet		
All Zones	Sleet accumulation of 1 inch or more, but less than 2 inches in 6 hours	Sleet accumulation of 2 inches or more in 6 hours
Snow and Heavy Snow		
021-026 (Juneau)	4–5 inches in 12 hours	6 inches in 12 hours or 12 inches in 24 hours
027-028 (Juneau)	3–5 inches in 12 hours	6 inches in 12 hours or 12 inches in 24 hours
029 (Juneau)	8– 11 inches in 12 hours	12 inches in 24 hours
101-195 (Anchorage)	6–11 inches in 12 hours or 12–23 inches in 24 hours	12 inches in 12 hours or 24 inches in 24 hours
201-214 (Fairbanks)	None	6 inches in 24 hours
215-226 (Fairbanks)	4–5 inches in 12 hours	6 inches in 24 hours

Zones (WFO)	Advisory Threshold	Warning Threshold
Winter Weather or Winter Storm		
All Zones	Winter weather event having more than one predominant hazard meeting or exceeding locally defined 12 and/or 24 hour advisory criteria for at least one of the precipitation elements, but remaining below warning criteria.	Winter weather event having more than one predominant hazard meeting or exceeding locally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements.

Table A-1 – Winter weather advisory and warning thresholds for Alaska zones.

APPENDIX B - Examples of NWS Alaska Winter Weather Products

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1. Description. The examples shown in this Appendix are consistent with the national format policies for watches, warnings, and statements. The format of zone names and city strings shown in the UGC block for each segment are based upon zone name changes that will be implemented in March 2003.

2. Winter Storm Outlook.

WWAK83 PAFG 061356
SPSAFG
AKZ207>210-216>218-070200-

WINTER STORM OUTLOOK
NATIONAL WEATHER SERVICE FAIRBANKS AK
555 AM ADT SUN OCT 6 2002

...THE FIRST MAJOR WINTER STORM OF THE SEASON IS EXPECTED TO
IMPACT THE WESTERN INTERIOR AND NORTHWESTERN COAST BY MIDWEEK...

A STRONG LOW PRESSURE SYSTEM IS EXPECTED TO DEVELOP OVER THE
CHUKCHI SEA LATE TUESDAY INTO WEDNESDAY. THIS SYSTEM COULD CAUSE
BLIZZARD CONDITIONS ACROSS THE NORTHWEST COAST AND HEAVY SNOW
OVER PORTIONS OF THE WESTERN INTERIOR ON WEDNESDAY.

PERSONS IN...OR PLANNING TRAVEL THROUGH...NORTHWESTERN ALASKA AND
THE WESTERN INTERIOR SHOULD BE AWARE OF THE POSSIBILITY OF
HAZARDOUS WINTER WEATHER CONDITIONS WEDNESDAY. PAY CLOSE
ATTENTION TO THE LATEST WEATHER FORECAST INFORMATION AS THIS
WINTER WEATHER SITUATION CONTINUES TO UNFOLD.

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JL OCT 02 (Optional)

3. Winter Storm Watch.

WWAK47 PAJK 092157
WSWAJK

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE JUNEAU AK
100 PM AST SAT MAR 9 2002

...SOUTHERN PANHANDLE COULD SEE OVER A FOOT OF NEW SNOW BY
MONDAY...

.A WARM FRONT MOVING INTO THE SOUTHERN PANHANDLE ON SUNDAY
COMBINED WITH ARCTIC AIR FROM THE CANADIAN INTERIOR WILL LIKELY
RESULT IN HEAVY SNOWFALL ACROSS THE SOUTHERN PANHANDLE.

AKZ027-028-029-100400-
SOUTHERN INNER CHANNELS AK-DIXON ENTRANCE TO CAPE DECISION
COASTAL AREA AK-MISTY FJORDS AK-
INCLUDING THE CITIES OF...KETCHIKAN...METLAKATLA...CRAIG...
KLAWOCK...HYDER...THORNE BAY
100 PM AST SAT MAR 9 2002

...WINTER STORM WATCH IS IN EFFECT FOR SUNDAY AND SUNDAY NIGHT...

LOCALLY HEAVY SNOW IS EXPECTED IN THE SOUTHERN PANHANDLE SUNDAY
AND SUNDAY NIGHT. 6 TO 12 INCHES OF SNOW COULD ACCUMULATE BY
SUNDAY NIGHT IN THE SOUTHERN INNER CHANNELS AND ALONG THE
SOUTHERN OUTER COAST... AND 12 TO 16 INCHES OF NEW SNOW IS
EXPECTED IN THE HYDER AREA BY LATE SUNDAY.

A WATCH MEANS CONDITIONS ARE FAVORABLE FOR HAZARDOUS WINTER
WEATHER TO DEVELOP IN AND CLOSE TO THE WATCH AREA. PEOPLE ARE
ENCOURAGED TO CLOSELY MONITOR THIS WEATHER SITUATION.
PREPARATIONS FOR THIS POTENTIALLY DANGEROUS WEATHER EVENT SHOULD
BEGIN NOW.

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CM MAR 02 (Optional)

4. Winter Weather Warning.

WWAK44 PAFC 282358
WSWALU
URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE ANCHORAGE AK
500 PM AST WED FEB 27 2002

AKZ181-280800-
ALASKA PENINSULA AK-
INCLUDING...COLD BAY...SAND POINT
500 PM AST WED FEB 27 2002

...BLIZZARD WARNING IN EFFECT THIS EVENING...

NORTHWEST WINDS 30 MPH GUSTING TO 55 MPH WILL REDUCE VISIBILITY TO NEAR ZERO IN SNOW AND BLOWING SNOW THIS EVENING. CONDITIONS ARE EXPECTED TO IMPROVE BY MIDNIGHT AS WINDS DIMINISH TO WEST 15 TO 25 MPH.

A WARNING MEANS A SERIOUS THREAT TO LIFE AND PROPERTY IS OCCURRING OR IMMINENT. ALL TRAVEL OR OUTDOOR ACTIVITY IS STRONGLY DISCOURAGED.

THE NEXT STATEMENT IS SCHEDULED AT 1100 PM AST.

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D FEB 02 (Optional)

5. Winter Weather Advisory.

WWAK47 PAJK 291556
WSWAJK

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE JUNEAU AK
700 AM AST TUE JAN 29 2002

AKZ021-025-026-292200-
GLACIER BAY AK-JUNEAU BOROUGH+EASTERN CHICHAGOF+ADMIRALTY ISLAND
AK-INNER CHANNELS FROM KUPREANOF ISLAND TO ETOLIN ISLAND AK-
INCLUDING...GUSTAVUS...JUNEAU...HOONAH...ANGOON...WRANGELL...
PETERSBURG AND KAKE
700 AM AST TUE JAN 29 2002

...FREEZING RAIN ADVISORY IN EFFECT THROUGH THIS MORNING...

FREEZING DRIZZLE AND RAIN WILL CONTINUE TO PRODUCE SLIPPERY CONDITIONS ON ROADS AND WALKWAYS IN THE COMMUNITIES OF GUSTAVUS...JUNEAU...PETERSBURG...WRANGELL...AND KAKE THIS MORNING. THE FREEZING PRECIPITATION SHOULD BECOME MIXED WITH RAIN AS THE TEMPERATURES WARM INTO THE 30S THROUGH EARLY AFTERNOON.

AN ADVISORY MEANS A POTENTIALLY HAZARDOUS EVENT IS OCCURRING OR IMMINENT. MOTORISTS SHOULD USE EXTREME CAUTION DUE TO POTENTIALLY HAZARDOUS ROAD CONDITIONS.

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CM JAN 02 (Optional)

6. Combination of winter weather events.

WWAK42 PAFG 190059
WSWWCZ

URGENT- WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE FAIRBANKS AK
400 PM AST WED DEC 18 2002

...A MAJOR WINTER STORM WILL IMPACT NORTHWEST ALASKA THURSDAY...

.THE STRONGEST STORM TO STRIKE NORTHWEST ALASKA IN THE PAST YEAR WILL APPROACH THE BERING STRAIT THURSDAY. IT WILL GENERATE SNOW AND VERY HIGH WINDS. BLIZZARD CONDITIONS AND COASTAL FLOODING ARE ALSO POSSIBLE.

AKZ207-213-190700-
CHUKCHI SEA COAST AK-ST LAWRENCE ISLAND+BERING STRAIT COAST AK-
INCLUDING...POINT HOPE...SHISHMAREF...KIVALINA...RED DOG PORT...
GAMBELL...SAVOONGA...BREVIG MISSION...TELLER...LITTLE DIOMEDE...
WALES
400 PM AST WED DEC 18 2002

...HIGH WIND WARNING IN EFFECT FOR THURSDAY THROUGH FRIDAY...

SOUTH WINDS TO 60 MPH WITH GUSTS TO 75 MPH ARE EXPECTED IN THE BERING STRAIT SATURDAY THROUGH SUNDAY. THE WIND WILL BE ACCOMPANIED BY A DRIVING MIX OF RAIN AND SNOW.

A WARNING MEANS A SERIOUS THREAT TO LIFE AND PROPERTY IS OCCURRING...IMMINENT... OR HIGHLY LIKELY. ACTION SHOULD BE TAKEN WITHOUT DELAY TO PROTECT AND SECURE STRUCTURES. LOOSE OBJECTS THAT MAY BE BLOWN AROUND OR DAMAGED IN THE WIND SHOULD BE BROUGHT INDOORS.

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AKZ201-208-211-190700-
WESTERN ARCTIC COAST AK-LOWER KOBUK AND NOATAK VALLEYS AK-
SOUTHERN SEWARD PENINSULA COAST AK-
INCLUDING...WAINWRIGHT...ATQASUK...POINT LAY...NOATAK...KIANA...
RED DOG MINE...NOME...WHITE MOUNTAIN...GOLOVIN
400 PM AST WED DEC 18 2002

...BLIZZARD WATCH IN EFFECT FOR THURSDAY...

STRONG SOUTHWEST WINDS OF 35 TO 50 MPH AND BLOWING SNOW ARE
EXPECTED TO REDUCE VISIBILITY BELOW ONE QUARTER MILE SUNDAY. LOW
WIND CHILLS WILL ACCOMPANY THE STORM ALONG WITH CONSIDERABLE
FALLING AND DRIFTING SNOW.

A WATCH MEANS CONDITIONS ARE FAVORABLE FOR HAZARDOUS WINTER
WEATHER TO DEVELOP IN AND CLOSE TO THE WATCH AREA. PEOPLE ARE
ENCOURAGED TO CLOSELY MONITOR THIS WEATHER SITUATION.
PREPARATIONS FOR THIS POTENTIALLY DANGEROUS WEATHER EVENT SHOULD
BEGIN NOW. TRAVEL AND OUTDOOR ACTIVITY WILL BE VERY DANGEROUS
ONCE THE STORM HITS.

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